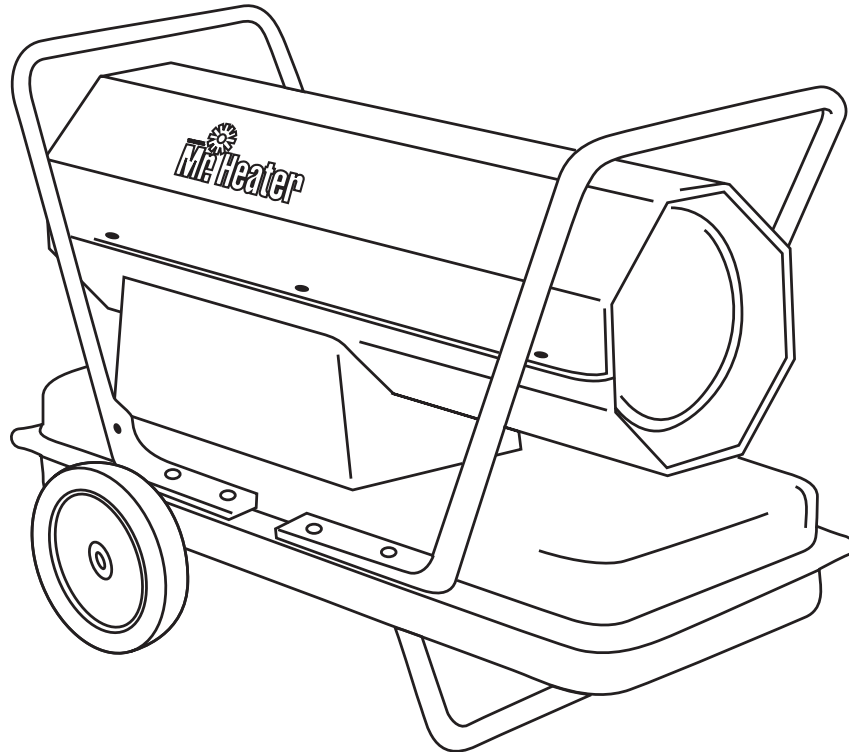




OPERATING INSTRUCTIONS AND OWNER'S MANUAL

Model #
MH75KT
MH125KT
MH175KT

READ INSTRUCTIONS CAREFULLY: Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.



KEROSENE FORCED-AIR HEATER

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Service must be performed by a qualified service agency.

This is an unvented portable heater. It uses air (oxygen) from the area in which it is used. Adequate combustion and ventilation air must be provided. Refer to page 3.

WARNING:

- ⚠ YOUR SAFETY IS IMPORTANT TO YOU AND TO OTHERS, SO PLEASE READ THESE INSTRUCTIONS BEFORE YOU OPERATE THIS HEATER.

GENERAL HAZARD WARNING:

- ⚠ FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER, CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND/OR ELECTRICAL SHOCK.
- ⚠ ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.
- ⚠ IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS AN INSTRUCTIONS MANUAL, LABELS, ETC. CONTACT THE MANUFACTURER.

WARNING:

- ⚠ NOT FOR HOME OR RECREATIONAL VEHICLE USE

WARNING:

- ⚠ FIRE, BURN, INHALATION, AND EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER OR CARDBOARD, A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES OR UNKNOWN CHEMICALS.

WARNING:

- ⚠ **The State of California requires the following warning:** COMBUSTION BY-PRODUCTS PRODUCED WHEN USING THIS PRODUCT CONTAIN CARBON MONOXIDE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS (OR OTHER REPRODUCTIVE HARM).

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SPECIFICATIONS

Type of Gas: For use with Kerosene or #1 Fuel Oil ONLY on ALL models

Model: **MH75KT** **MH125KT** **MH175KT**

BTU Rating: 75,000 BTU/hr 125,000 BTU/hr 175,000 BTU/hr

Electrical Input: 115V, 60HZ, 4a 115V, 60HZ, 5.5a 115V, 60HZ, 5.5a

Min. Operating Voltage: 110V 110V 110V

Ignition: Direct Spark, continuous Direct Spark, continuous Direct Spark, continuous

Spark Generator: Ignitor 7000V. sec. 10ma ignitor 7000V. ignitor 7000V 1.0ma

Primary Flame Safety: Solid State Control Solid State Control Solid State Control

Fuel Tank Capacity: 6 gallons 14 gallons 14 gallons

Fuel Consumption: 56 gal/hr 93 gal/hr 1.3 gal/hr

Certification: UL UL UL

OPERATING PRECAUTIONS

This is a kerosene, direct-fired, forced air heater. It's intended use is primarily temporary heating of buildings under construction, alteration or repair.

Direct-Fired means that all of the combustion products enter the heated space. Even though this heater operates very close to 100 percent combustion efficiency, it still produces small amounts of carbon monoxide. Carbon monoxide (called CO) is toxic. We can tolerate small amounts but not a lot. CO can build up in a heated space and failure to provide adequate ventilation could result in death. The symptoms of inadequate ventilation are:

- headache
- dizziness
- burning eyes and nose
- nausea
- dry mouth or sore throat

So, be sure to follow advice about ventilation in these operating instructions.

Forced Air means that a blower or fan pushes the air through the heater. Proper combustion depends upon this air flow; therefore, the heater must not be revised, modified or operated with parts removed or missing. Likewise, safety systems must not be circumvented or modified in order to operate the heater.

When the heater is to be operated in the presence of other people the user is responsible for properly acquainting those present with the safety precautions and instructions, and of the hazards involved.

SAFETY PRECAUTIONS

1. Check the heater thoroughly for damage. DO NOT operate a damaged heater.
2. DO NOT modify the heater or operate a heater which has been modified from its original condition.
3. Use only Kerosene or #1 fuel oil. Never use gasoline, naphtha, paint thinner, alcohol or other fuels of any kind.
4. For indoor use only. Use only in well ventilated areas. Provide at least 2 sq. ft. of opening near the floor and 2 sq.ft. of opening near the ceiling. (Also see "Operating Precautions").
5. Install the heater such that it is not directly exposed to water spray, rain and/or dripping water.
6. Maintain minimum clearance from normal combustible material (like paper) at least 8 ft. from the heater outlet and 3 ft. from the top, sides and inlet. Locate 10 ft. from canvas or plastic coverings and secure them to prevent flapping or movement.
7. Due to the high surface and exhaust temperatures, adults and children must observe clearances to avoid burns or clothing ignition.
8. Never use in areas normally for habitation and/or where children may be present.
9. Operate only on a stable, level surface.
10. Do not use with duct work. Do not restrict inlet or exit.
11. Use only the electrical power specified. The electrical connection and grounding must comply with National Electrical Code - ANSI/NFPA 70 (USA) and CSA C22.1 Canadian Electrical Code, Part 1 (Canada).
12. Use only a properly grounded 3-prong receptacle or extension cord.
13. Do not move, handle or service while hot or burning.
14. Use only in accordance with local codes and federal ordinances.

OPERATING INSTRUCTIONS

UNPACKING

1. Remove all protective material which may have been applied to the heater for shipment.
2. Remove heater from carton.
3. Check the heater for possible shipping damage. If any damage is found immediately notify the dealer from whom you purchased the heater.

ASSEMBLY (For 125,000 and 175,000 BTU/hr models only)

Wheel and handles are found in the shipping carton along with mounting hardware. The wheels, axle and mounting hardware are in a package. Tools required are a 5/16" nutdriver, 3/8" open or adjustable wrench and standard pliers.

1. Assemble the wheels onto the wheel support frame as follows:
 - a. Install one of the cotter pins into the hole on one end of axle.
 - b. Slide the large washer, then wheel onto the axle next to the cotter pin.
 - c. Slide a small washer, spacer, small washer onto the axle next to the wheel.
 - d. Slide the partially assembled axle through the wheel support frame.
 - e. Slide the small washer, spacer, and small washer onto the axle next to the wheel support.
 - f. Slide the wheel then large washer onto the axle and hold in place with the remaining cotter pin.
 - g. Install the caps over the larger washers to finish the wheel assembly.
2. Position the heater on the wheel support frame assembly with the exit end over the wheels.
3. Use eight screws and nuts to attach the handles to the top of the tank flange. The screws will go through the handles, tank flange and wheel support frame. Install the nuts and finger tight only until all nuts are installed.
4. Tighten all the nuts.
5. Attach cord caddies to handles using No. (14) & No. (5) screws and nuts.

PREPARING FOR OPERATION

1. Check the heater for possible shipping damage. If any is found, *immediately* notify the factory.
2. Follow all of the "Precautions".
3. Fill the fuel tank with clean kerosene, No. 1 fuel oil or No. 1 diesel fuel only. Kerosene is recommended for use when the temperature drops below 0°F (-18°C). In extremely cold weather, condensation may develop in the tank and it is recommended that a tablespoon of de-icer be added for each gallon (4 liters) of fuel in the tank. When filling the heater, use at least 2 gallons (8 liters) of fuel. Be sure heater is level and do not overfill. Use a funnel or can with a long fill spout.

IMPORTANT: Before filling fuel tank the first time or after extended storage periods, drain the fuel tank of any moisture or condensation.

4. Locate heater at a safe distance from combustible materials. Model MH75KT is not suitable for use on wood floors or other combustible materials. When used, the heater should rest on suitable insulating material at least 1 inch thick and extending 3 ft. or more beyond the heater in all directions.

START

1. Turn thermostat to lowest setting. Plug heater into a well grounded 115V, 60HZ, 1Ø outlet. Turn thermostat to highest setting. Start heater by pushing toggle switch to "ON" position (light signifies switch is in "ON" position). Adjust thermostat to desired setting. Heater will cycle on/off, as heat is required.

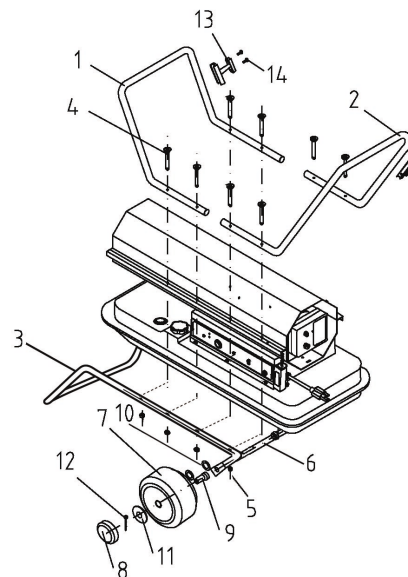
In cold weather, starting may be improved by holding a finger over the end of the pressure adjusting screw until the heater starts. This unit is equipped with a circuit breaker located near the power cord. If the unit does not start, check to see that the reset button is pressed in.

STOP

1. For a short duration shutdown, press toggle switch to "OFF" position. For extended shutdown, unplug the heater.

RESTART AFTER SAFETY SHUTDOWN

1. Wait 5 minutes.
2. Push reset button.



ITEM	PART NO.	DESCRIPTION	QTY.
1	3242	Handle, Front	1
2	4338	Handle, Rear	1
3	4339	Wheel Support Frame	1
4	6977	Machine Screw Blk (long)	8
5	6037	Kep Nut Blk	12
6	8746	Axle	1
7	M8752	Wheel	2
8	8751	Cap	2
9	8748	Spacer	2
10	8747	Washer, Small	4
11	8749	Washer, Large	2
12	8750	Cotter Pin	2
13	8754	Ext. Cord Caddy	2
14	7336	Machine Screw Blk (sheet)	4

MAINTENANCE AND STORAGE

WARNING. To prevent personal injury, unplug the heater from the wall outlet before servicing.

For maximum efficiency and trouble-free service, make the following periodic maintenance, cleaning and inspections.

DAILY SCHEDULE

1. **GENERAL.** Make general visual inspection of heater for loose or damaged parts. Check nuts and bolts to insure against looseness caused by vibration or rough handling. Damaged parts should be repaired or replaced before using heater again. Check heater operation to be sure it is operating normally (See "Servicing" section for description of normal operation).
2. **FILTERS.** Dirty air or fuel filters will cause an imbalance in the air-fuel mixture. The best indication that this condition exists is an increase in odors or difficulty getting your heater to ignite. This heater should never be operated without the filters in place. If required, clean filters as described under "500 Hours" and "Annual Schedules".

500 HOUR SCHEDULE

1. **AIR INTAKE FILTER.** Remove and wash the filter element with a mild detergent, dry thoroughly and replace. Do not oil the filter element. If your heater is used where there is considerable dust or dirt, clean as often as necessary (approximately every 50 hrs.).
2. **REMOVE DUST.** Clean heater twice a season (more often under dusty conditions). Remove accumulated dust from the transformer, burner, motor and fan blades with compressed air. Wipe area clean with a clean dry cloth. Inspect area to insure all foreign materials are removed, especially around the burner and combustion area.
3. **CAD CELL.** Clean the glass portion of the cad cell with a soft dry cloth.
4. **NOZZLE.** Accumulation of dirt from fuel and carbon from the compressor vanes will eventually fill up the passages in the nozzle, resulting in reduction of fuel and air flow. Pressure will gradually increase giving improper fuel-air mixture and excess odor and smoke. If this occurs, replace the fuel nozzle.
5. **FUEL TANK.** Clean twice a season (during frequently used periods, clean twice a month). Drain and flush the fuel tank with clean fuel oil.

ANNUAL SCHEDULE

1. **AIR OUTPUT FILTER.** Remove the air output filter and tap the contaminated side gently on a solid object to remove contaminants. Compressed air or liquids should not be used to clean this filter. Reinstall cleaned filter in filter body in the same position as it was when removed. If the filter appears extremely dirty, replace it with a new filter of the same type. When replacing the filter cover, be sure the gasket is firmly in place and the screws in the filter cover are tight to prevent air leaks.
2. **FUEL FILTER.** Remove the fuel filter from fuel line and direct compressed air through the filter in the opposite direction of fuel flow. Safety glasses should be worn when using compressed air.

3. **AIR AND FUEL LINES.** If the air or fuel lines are removed during cleaning, be sure all connections are tight before operating unit.
4. **AIR PRESSURE SETTING.** The air pressure has been properly set at the factory. If the air pressure is out of adjustment, it will most likely be caused by dirty air filters, a partially plugged nozzle, an air leak in the system or improperly set pressure. If adjustment becomes necessary, first determine the proper pressure setting for your heater which is printed on the serial label located on the fuel tank. Remove the plug from the air filter cover and attach an accurate pressure gauge calibrated to a maximum reading of 15 PSI. Start the heater and note the pressure reading. If the pressure is low, slowly turn the pressure adjusting screw in (Clockwise) until the correct pressure is obtained. If the air pressure is high, turn the adjusting screw out (counterclockwise) until the pressure is correct. When correct pressure is reached, unplug the heater, remove the gauge and replace the plug.

STORAGE

Store the heater in a dry location free from fumes or dust.

At the end of each heating season, clean the heater as described in the MAINTENANCE section. Drain and flush the fuel tank with clean fuel. The manufacturer recommends completely filling the tank with fuel for extended storage to minimize condensation inside the tank.

SERVICING

A hazardous condition may result if a heater is used that has been modified or is not functioning properly. When the heater is working properly:

- * The flame is contained within the heater.
- * The flame is essentially yellow.
- * There is no strong disagreeable odor, eye burning or other physical discomfort.
- * There is no smoke or soot internal or external to the heater.
- * There are no unplanned or unexplained shut downs of the heater.

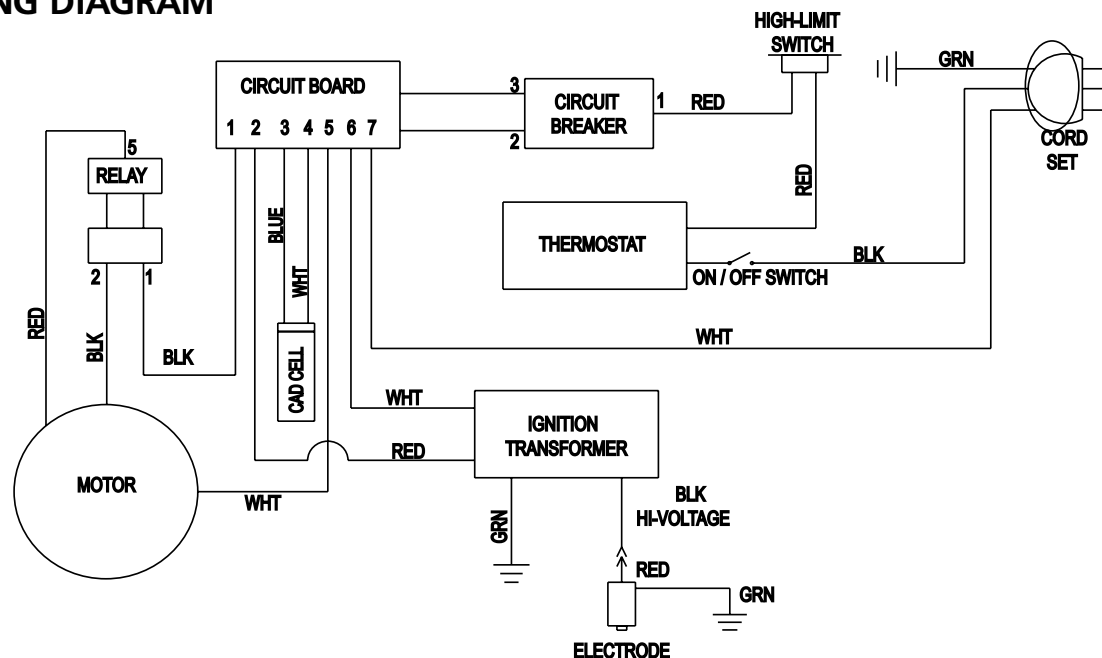
The parts lists and wiring diagram show the heater as it was constructed. Do not use a heater which is different from that shown. Heater performance is effected by air pressure setting. If there is any uncertainty about the air pressure setting, have it checked.

A heater which is *not* working right must be repaired, but *only* by a trained, experienced service person.

In-warranty products will be repaired with no charge for either parts or labor. Please include a brief statement indicating date, place of purchase, the nature of the problem and proof of purchase.

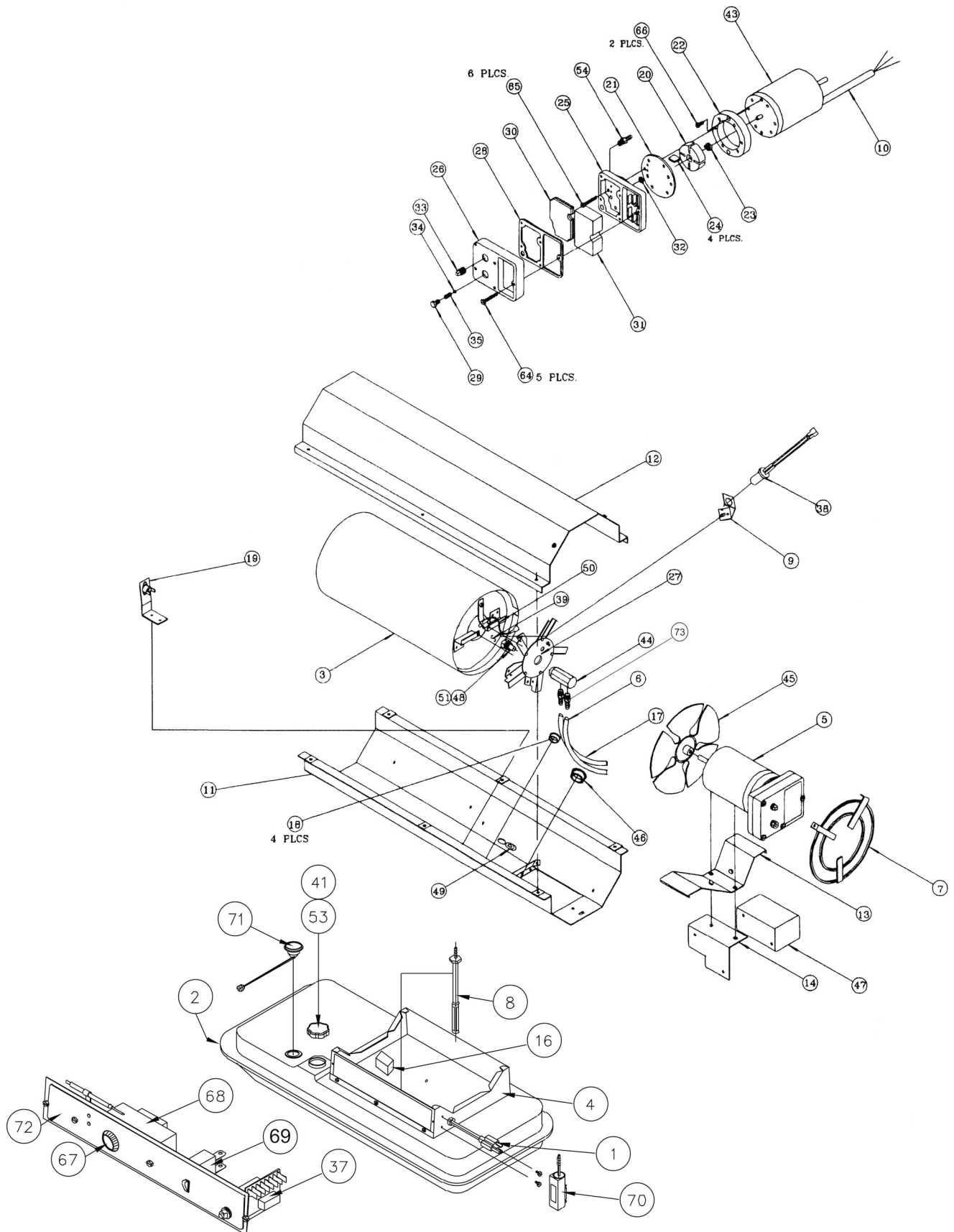
Out-of-warranty products will be repaired with a charge for parts and labor.

WIRING DIAGRAM



PARTS LIST

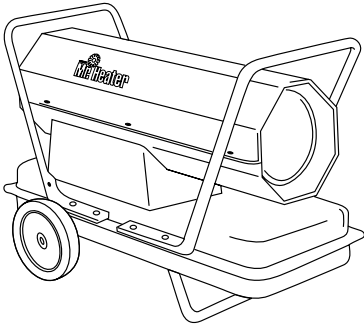
Ref. #	Item #	Item #	Item #	Description	Ref. #	Item #	Item #	Item #	Description
	MH75KT	MH125KT	MH175KT			MH75KT	MH125KT	MH175KT	
1	1036	1036	1036	Power Cord	39	2232	2233	2234	Comb. Chamber Cyl. Ass'y
2	2213	2214	2214	Fuel Tank Assembly	41	8736	8736	8736	Oil Fuel Cap
3	2215	2216	1783	Radiation Shield Ass'y	43	8737	8738	8738	Motor, 1/4 HP
4	2217	2218	2219	Control Box Ass'y	44	8739	8739	8739	Nozzle Adapter
5	2058	2059	2059	Power Pac Ass'y	45	8740	6865	6866	Fan
6	4343	4346	4346	Fuel Tube	46	—	6227	6227	Snap Bushing
7	8734	1771	1768	Grille Assembly	47	2138	2138	2138	Ignitor Assembly
8	8779	8780	8780	Fuel Filter Assy	48	8741	8742	8743	Fuel Air Aspir. Nozzle
9	4011	4011	4011	Oil Cad Cell Bracket	49	6223	6223	6223	Strain Relief Bushing
10	3449	3449	3449	Motor Cord Sleeve	50	2235	2235	2235	Electrode Assembly
11-1	2224	1805	3846	Bottom Shell	51	7429	7429	7429	Extrnl. Retaining Ring
12-1	2226	3845	3847	Top Shell	53	3487	3487	3487	Fuel Cap Gasket
13	4332	4333	4334	Motor Mounting Bracket	54	8744	8744	8744	Hose Barb Adapter
14	3705	3818	3705	Ignition Mounting Brkt	*	7094	—	—	Clip Hanle Mtg.
16	8735	8735	8735	Start Capacitor	*	7095	—	—	Handle
17	4344	4345	4345	Air Tube	*	1683	1683	1683	Lead Wire Ass'y Green
18	6225	6225	6225	Snap Bushing	*	1040	1040	1040	Lead Wire Ass'y Black
19	1796	1797	1798	High Limit Control	*	—	—	6225	Snap Busing Nylon
20	6831	6831	6831	Air Pump Rotor	*	8745	6862	6862	Fuel Filter Bushing
21	6832	6832	6832	Backing Plate	64	6838	6838	6838	Screw, Tapping #9 x 1-1/4"
22	6833	6833	6833	Air Pump Cylinder	65	6908	6908	6908	Screw, Machine #10 x 1-1/4"
23	6834	6834	6834	Nylon Air Pump Insert	66	6906	6906	6906	Screw, Machine #10 x 1/2"
24	6835	6835	6835	Air Pump Vane (4 ea.)	67	1942	1942	1942	Thermostat Knob
25	6836	6836	6836	Lower Housing	*	3441	3441	3441	Bracket Thermostat Mtg.
26	6837	6837	6837	Upper Housing	68	1734	1734	1734	Thermostat Assembly
27	2257	2257	2257	Burner	*	6070	6070	6070	Clamp Loop
28	6839	6839	6839	Gasket	69	8785	8785	8785	ON/OFF Switch
29	6842	6842	6842	Adjusting Screw	70	8782	8781	8781	Pressure Guage
30	6843	6843	6843	Outlet Filter	71	8778	8778	8778	Fuel Guage
31	6844	6844	6844	Inlet Filter	72	4341	4342	4342	Access Panel
32	6848	6848	6848	O Ring	73	8783	8783	8783	Hose Barb Adaptor
33	6849	6849	6849	Nylon Pipe Plug	*	M8682	M8683	M8683	Logo, Mr. Heater
34	6850	6850	6850	Relief Ball, 1/4" Dia.					
35	6851	6851	6851	Spring, 24 O.D. x .58					
37	6863	6863	6863	Oil Flame Control Assembly					
38	6865	6865	6865	Cad Cell Flame Sensor					





OPERATING INSTRUCTIONS AND OWNER'S MANUAL

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WARNING:

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH. REPLACEMENT PARTS ARE ONLY AVAILABLE DIRECT FROM THE FACTORY AND MUST BE INSTALLED BY A QUALIFIED SERVICE AGENCY.

PARTS ORDERING INFORMATION:

PURCHASING: Accessories may be purchased at any Mr. Heater local dealer or direct from the factory

FOR INFORMATION REGARDING SERVICE

Please call Toll-Free 800-251-0001 • www.mrheater.com

Our office hours are 8:30 AM – 5:00 PM, EST, Monday through Friday.

Email to: techservice@enerco-mrheater.com

Please include the model number, date of purchase, and description of problem in all communication.

LIMITED WARRANTY

The company warrants this product to be free from imperfections in material or workmanship, under normal and proper use in accordance with instructions of The Company, for a period of one year from the date of delivery to the buyer. The Company, at its option, will repair or replace products returned by the buyer to the factory, transportation prepaid within said one year period and found by the Company to have imperfections in material or workmanship.

If a part is damaged or missing, call our Technical Support Department at 800-251-0001.

Address any Warranty Claims to the Service Department, MR. HEATER INC., 4560 W. 160TH ST., CLEVELAND, OHIO 44135. Include your name, address and telephone number and include details concerning the claim. Also, supply us with the purchase date and the name and address of the dealer from whom you purchased our product.

The foregoing is the full extent of the responsibility of the Company. There are no other warranties, express or implied. Specifically there is no warranty of fitness for a particular purpose and there is no warranty of merchantability. In no event shall the Company be liable for delay caused by imperfections, for consequential damages, or for any charges of the expense of any nature incurred without its written consent. The cost of repair or replacement shall be the exclusive remedy for any breach of warranty. There is no warranty against infringement of the like and no implied warranty arising from course of dealing or usage of trade. This warranty will not apply to any product which has been repaired or altered outside of the factory in any respect which in our judgment affects its condition or operation.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Mr. Heater Inc. reserves the right to make changes at any time, without notice or obligation, in colors, specifications, accessories, materials and models.



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